

科研支援 Scientific Support

體院採用生物、生理、社會學三者結合的模式來制訂支援策略，提供以科學為本、運動員為中心的精英培訓支援服務。運動科學、運動醫學及體適能部透過緊密的團隊合作，識別不同的訓練問題，然後與相關教練研究可行的解決方案。體院並會定期修訂各項科研支援服務的程序，確保運動員得到最適切的服务。

運動科學

體院的運動科學部負責一切有關運動生化、生物力學、營養、生理及心理的事宜，為獎學金運動員提供多方面的專業科研支援，包括科學測試、技術分析及改良、訓練及恢復監控、運動營養諮詢，以及心理控制的技巧訓練和諮詢。年度內的主要工作包括：

- 提供合共500天的海外科研支援服務，讓教練得到更多臨場支援，全力協助運動員備戰大型運動會及國際比賽。
- 在三個國際會議上合共發表了六份研究報告，另有六份論文獲國際性的運動科研刊物刊登。
- 與本港及內地多間大學共同開展五項研究計劃。
- 於本地大學舉行講座，並為準畢業生提供實習機會，協助培訓本地運動科研人才。
- 為本地運動員、教練及體育總會舉辦講座及研討會。
- 與到訪的內地、日本及新加坡同業交流運動科研支援與服務方面的發展資訊。

運動醫學

運動醫學部為獎學金運動員提供醫療支援，包括體格檢查、西醫門診、骨科門診、物理治療、中醫手法治療、康復訓練、運動療法及運動按摩服務。部門每年均會舉辦多個講座及工作坊和製作刊物，教導運動員如何預防運動創傷，以增進他們在應用運動醫學方面的知識。此外，又會定期向運動員提供肌肉骨骼檢定、運動姿勢及活動障礙評估，以及舉辦柔韌性、肩部及腰背穩定運動訓練班。年度內的主要工作包括：

- 於海外賽事期間，為教練及運動員提供合共1,456天的臨場支援服務，以及於本地集訓和比賽提供134天的臨場支援服務，以備戰大型運動會及國際賽事。
- 為本地運動員、教練及體育總會舉辦了七次研討會，以及為國際同業發表了一次演講。

In order to provide science-based, athlete-centred support for elite training, the HKSI uses a biopsychosocial model to formulate the support strategy. The Sports Science, Sports Medicine, and Strength & Conditioning Departments work as a team to identify the various training problems and concerns, and explore possible solutions with the relevant coaches. The support procedures are regularly updated through continuous monitoring and discussion.

Sports Science

The HKSI Sports Science Department, which is responsible for all matters related to sports biochemistry, biomechanics, nutrition, physiology and psychology, provides a broad spectrum of expert scientific support for Scholarship Athletes. This includes scientific testing, technique evaluation and enhancement, training and recovery monitoring, sports nutrition consultation, and psychological training and consultation. Major tasks during this fiscal year included the following:

- Providing coaches with more on-site support in preparing athletes for Major Games and international competitions. To facilitate this, a total of 500 days of overseas scientific support services were provided.
- Presenting six research articles at three international conferences and publishing six papers in international, peer-reviewed sports science journals.
- Collaborating on five joint research projects with universities in Hong Kong and the Mainland.
- Organising seminars at local universities and providing internships to train and develop local sports science experts.
- Organising seminars and symposia for local athletes, coaches and NSAs.
- Receiving visiting sports professionals from the Mainland, Japan and Singapore for the exchange of information on sports science and related services.

Sports Medicine

The Sports Medicine Department provides Scholarship Athletes with medical support services, including physical examinations, general clinic, orthopaedic consultation, physiotherapy, Chinese manual therapy, rehabilitative training, therapeutic exercise and sports massage services. Every year, it organises various seminars and workshops, and produces a number of publications to educate athletes on the prevention of sports-related injuries and to increase their knowledge of practical sports medicine. It also provides athletes with regular musculo-skeletal evaluations, postural and movement impairment assessments for sports activities, and training sessions for enhanced flexibility, and shoulder and core stability. Major tasks in this fiscal year included the following:

- Providing 1,456 days of on-site support services to coaches and athletes for overseas sporting events, and 134 days for local training sessions and competitions, in preparation for participation in Major Games and international competitions.
- Organising seven seminars for local athletes, coaches and NSAs, and providing one presentation for international professionals.

體適能訓練

體適能部與運動科學及運動醫學兩個部門緊密合作，制訂和執行以科學為基礎的體適能訓練計劃，透過改善運動員的爆發力、肌肉力量、速度和機動能力，提升他們的表現，充份發揮他們的潛能。部門利用科學測試，包括血液乳酸、血液化學組成、最大攝氧量、最大反覆力量測試及其他指標性的臨場測試，設計和監察訓練參數，從而確保能更準確地決定有效的訓練負荷量及強度。有關計劃專為精英和青少年獎學金運動員而設，並根據個別運動項目的高度特定需求而制訂。

位於火炭的體能訓練中心經擴建後，面積較原先大一倍，設施亦得到全面提升，並分為五大區域，分別設置可鍛鍊力量和心肺耐力的器械，還有氣壓式、機械式和舉重器材。年度內，體能訓練中心的平均每月使用次數為1,757次。

體適能部亦為運動員及教練舉辦了多個體適能講座與工作坊，包括於二零零九年九月十二日舉行、獲美國國家體適能總會持續教育組認可的「推進體適能訓練」研討會（詳情請參閱第57頁）。各項活動分別於體院的演講室及訓練場地舉行。

Strength and Conditioning

The Strength & Conditioning Department works closely with the Sports Science and Sports Medicine Departments to develop and implement science-based strength and conditioning programmes designed to optimise athletes' performance by improving their power, strength, speed and mobility, thus enabling them to perform to their fullest potential. This is done by the use of scientific tests such as blood lactate, blood chemistry, VO2 Max, repetition maximum strength tests, and other objective field tests to design and monitor training parameters. This ensures a more precise determination of effective training load and intensity. The programmes are designed for elite and junior Scholarship Athletes based on the highly specific requirements of individual sports.

The upgraded Fitness Training Centre in Fo Tan, which has doubled in size, is arranged into five major zones: strength and power, air power, machine circuit, free weights and cardio. On average, the Centre was used 1,757 times per month throughout the year.

The Department also provided lectures and workshops to both athletes and coaches on topics relating to strength and conditioning, including an accredited seminar by the National Strength and Conditioning Association Continuing Education Units, entitled "Taking Strength and Conditioning to the Next Level", on 12 September 2009 (see page 57 for details). These took place both in the lecture room and at the training venues of the HKSI and its satellite-training centres.



體能訓練中心經擴建後較原先大一倍。
The upgraded Fitness Training Centre
has doubled in size.



運動醫學中心為運動員提供專業治療。
The Sports Medicine Centre provides
professional treatment for athletes.

運動科學中心新設的環境控制倉
The new Environmental Chamber
in the Sports Science Centre





體育研究及資訊

體育研究及資訊組主要透過轄下的香港體育資訊中心(中心)，為運動科學及運動醫學專家、教練、運動員、體育總會、學術機構及體育專業人士提供最新的體育資訊服務，配合他們的需要。

中心收藏了約1萬4,000冊中英文書籍、2,300項視聽資料、500份期刊及1,000份由SPORTDiscus收錄的電子期刊，內容涵蓋運動科學及運動醫學、培訓、體育及康樂。此外，中心又提供網上資源，包括網上目錄、互聯網資源、研究報告及研究摘要。為幫助使用者充份利用這些資源，中心亦提供諮詢服務、館際互借服務、視聽器材設備及閱覽區。現時，中心提供兩個電子數據資料庫，分別是EBSCOhost的SPORTDiscus全文數據庫及萬方數據資料庫。SPORTDiscus全文數據庫備有索引，可查閱超過440份可追溯至一九八五年的期刊，內容涵蓋各種有關運動的題材。萬方數據資料庫內則設有兩個數據庫可供檢索，分別是「中國學位論文全文數據庫」及「中國數字化期刊」，提供摘要或PDF格式的中文全文。

體育研究及資訊組亦為體院每年舉辦的國際科學研討會提供秘書處服務，並為體院的科研及出版工作提供行政及技術支援。

Research and Sports Information

The Research & Sports Information Section provides up-to-date sports information services through the Hong Kong Sports Information Centre (HKSIC) to meet the needs of sports science and sports medicine professionals, coaches, athletes, NSAs, academic institutions and physical education specialists.

The HKSIC houses some 14,000 Chinese and English books, 2,300 audio-visual items, 500 printed journals and 1,000 e-journals from SPORTDiscus, covering sports science and sports medicine, coaching, physical education and recreation. A host of online resources are also available, including online catalogues, Internet resources, research reports and research highlights. To help users fully benefit from this breadth of information, the HKSIC provides reference services, Interlibrary Loan Services, audio-visual viewing facilities and reading areas. The HKSIC also provides two electronic databases, namely EBSCOhost's SPORTDiscus with Full Text and Wanfang Data. EBSCOhost's SPORTDiscus with Full Text provides indexed, full-text access to more than 440 journals dating back to 1985 and covering all aspects of sports subjects. Wanfang Data comprises two databases entitled "China Academic Dissertations Full-Text Database" and "China Digitised Journals", both of which provide abstracts or full-text Chinese articles in PDF format.

The Section also provides secretariat support for the HKSI's annual International Scientific Symposium, as well as administrative and technical support for the HKSI's scientific research and publications.

運動員發展 Athlete Development

個人/社交發展計劃

運動員事務部因應體院獎學金運動員的特別需要，制訂不同的支援計劃，照顧他們在社會、個人及職業技能等重要範疇的發展需要，讓這些具天賦的運動員全情投入精英訓練生活。

在二零零九/一零年度內，共有112名運動員獲提供學業資料及輔導服務，另有16名運動員透過運動員獎學金計劃，成功獲推薦入讀本地大學及大專院校。部門亦為個別體育項目的運動員安排了合共35項社交及個人技能發展計劃，這些計劃特別因應運動員的個人及社交發展需要而設計，內容涵蓋語文、生活技能、領導才能、表達與溝通技巧、團隊訓練、建立專業形象，以至香港稅務條例等各方面。

Personal/Social Development Programmes

The Athlete Affairs Department supports the special needs of HKSI's gifted Scholarship Athletes through a number of programmes designed to enable them to fully dedicate themselves to an elite training lifestyle, without neglecting important social, personal and vocational developmental needs.

In 2009/10, 112 athletes received educational information and guidance from the Department, and 16 athletes were recommended for further studies at local universities and tertiary institutes through the Sports Scholarship Scheme. A total of 35 social and vocational development programmes were also arranged for athletes of individual sports, covering topics from language, life-skills, leadership, presentation and communication skills, team building and professional image presentation to Hong Kong taxation requirements. These programmes were tailored to each individual's personal-social development needs.